



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/706,352

11/12/2003

Dumont M. Jones

DMJ 2-002

6770

266

7590

05/18/2006

MUELLER AND SMITH, LPA  
MUELLER-SMITH BUILDING  
7700 RIVERS EDGE DRIVE  
COLUMBUS, OH 43235

EXAMINER

LOVEL, KIMBERLY M

ART UNIT

PAPER NUMBER

2167

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/706,352	<b>Applicant(s)</b> JONES ET AL.	
	<b>Examiner</b> Kimberly Lovel	<b>Art Unit</b> 2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/19/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-24 are rejected.

#### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 19 February 2004 was filed after the mailing date of the application on 12 November 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Drawings***

3. The drawings are objected to because of the following:

Fig. 8 labels the line between nodes 154 and 156 as item 167, however, page 17, lines 4-5 of the applicants' specification labels the line as item 160;

Page 19, line 19 of the applicants' specification in regards to Fig. 10 should recite "block 258" instead of "block 248;" and

Fig. 11 labels the line between blocks 370 and 374 as item 272, however, page 22, line 32 of the applicants' specification labels the line as item 372.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: item 429 mentioned on page 24, line 9 and item 744 mentioned on page 32, line 11. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: item 821 of Fig. 12 and item 822 of Fig. 12. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

6. Claims 8, 13, 22 and 23 are objected to because of the following informalities:

Claim 8 comprises of two steps *l* and *m*. It is suggested that the word *and* be inserted after the semicolon on line 3 of the claim.

Claim 13, line 2 has a period after the word *documents*. It is suggested that the period be changed to a comma.

Claim 22, line 7 has a semicolon after the word *comprising*. It is suggested that the semicolon be replaced with a colon.

Claim 23, line 3 recites "(c81)." It is suggested that "(c81)" be replaced with "(c8.1)."

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2003/0135513 to Quinn et al (hereafter Quinn et al) in view of US PGPub 2005/0086238 to Nevin, III (hereafter Nevin).

**Referring to claim 1**, Quinn et al disclose a method for evaluating the text content of a database. In particular, Quinn et al disclose a method for evaluating the text content of a document database with respect to a document population (see abstract – according to page 6, line 31 – page 7, line 2 of the applicants' specification, the term document can be *one or more sequences of binary (non-text) data, one or more numeric values, one or more attributes, one or more (other) documents*), comprising the steps of:

(a) providing a computer system having a user interface with a display (see [0106]);

(b) gathering documents from said database into said system (see [0040], lines 1-4);

(c) normalizing said gathered documents (see [0055], lines 1-5);

(d) fingerprinting said gathered documents (see [0054]);

(e) determining a text criteria with respect to said document population (see [0093], lines 4-7 – the different genres are considered to represent the *text criteria*).

However, while Quinn et al disclose the method including the limitations of (a)-(e), Quinn et al fail to explicitly teach the further limitations of:

(f) forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction;

(g) loading said text criteria into at least one of said nodes;

(h) for each document of said database, calculating its geometric relative distance from a said node to derive one or more node attractors;

(i) displaying said net at said display in combination with one or more document symbols each representing a said document located in correspondence with said calculated relative distance;

(j) visually examining the display of said net and document symbols; and

(k) determining from said document symbol locations at said display those documents, if any, which are more likely to correspond with said text criteria.

Nevin discloses a method of displaying and storing data in linked nodes (see abstract), including the further limitations of:

(f) forming a net comprising at least two nodes associated by at least one interaction and displayable at said display as two or more spaced apart nodes connected by an interaction (see Fig 1);

(g) loading said text criteria into at least one of said nodes (see [0081] – data is stored in the nodes);

(h) for each document of said database, calculating its geometric relative distance from a said node to derive one or more node attractors (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(i) displaying said net at said display in combination with one or more document symbols each representing a said document located in correspondence with said calculated relative distance (see [0033]; [0084]; and Fig 2);

(j) visually examining the display of said net and document symbols (see [0084], lines 14-17); and

(k) determining from said document symbol locations at said display those documents, if any, which are more likely to correspond with said text criteria (see [0313] and [0315] – the user determines which categories are considered to be good or bad).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the documents of Quinn et al, which have been gathered, normalized, fingerprinted and categorized. One would have been motivated to do so to provide a



better method for interfacing with playlists in a manner that interactively provides genres to the user (Quinn et al: see [0016], lines 7-9).

**Referring to claim 2**, the combination of Quinn et al and Nevin (hereafter Quinn/Nevin) discloses the method of claim 1 in which:

said step (f) forming a net provides for the display of said net as having said nodes defined as circles and said interaction defined as a line extending between said circles (Nevin: see Fig. 8 – examples of the nodes include Painting\_Techniques, Eggs, Art\_Practice, Renaissance-Paintings and Religious\_Images).

**Referring to claim 3**, Quinn/Nevin discloses the method of claim 1 in which:

said step (g) loads said text criteria into a positive designated one of said nodes (Nevin: see [0031] and [0083], lines 4-14 – data is stored in the nodes; a node can have a positive position).

**Referring to claim 4**, Quinn/Nevin discloses the method of claim 1 in which:

said step (f) forms said net as comprising a said positive designated node and a null designated node connected by a said interaction (Nevin: see [0083]; [0084], lines 4-14; [0123] – the last node is used as the null node; the nodes are connected by lines to demonstrate an interaction).

**Referring to claim 5**, Quinn/Nevin discloses the method of claim 1 in which:

said step (e) determines said text criteria as criteria document textual material (Quinn et al: see [0093], lines 4-7 – the different genres are considered to represent the *text criteria*); and

said step (g) comprises the steps:

(g1) normalizing said criteria document textual material (Quinn et al: see [0055], lines 1-5); and

(g2) fingerprinting the normalized criteria document textual material (Quinn et al: see [0054]).

**Referring to claim 6**, Quinn/Nevin discloses the method of claim 1 in which:

said step (e) determines a positive text criteria and a negative text criteria with respect to said document population (Nevin: see [0084], lines 4-14);

said step (f) forms a net comprising one or more positive designated nodes, one or more negative designated nodes and one or more interactions (Nevin: see [0084], lines 4-14);

said step (g) loads said positive text criteria into said one or more positive designated nodes, and said negative text criteria into said one or more negative designated nodes (Nevin: see [0031] – the data is stored in the nodes); and

said step (h) calculates, for each document of said database its geometric relative distance from both said positive designated node and said negative designated node (Nevin: see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*).

**Referring to claim 7**, Quinn/Nevin discloses the method of claim 1 in which:

said step (i) displays said one or more document symbols as squares (Nevin: see Fig 8 – examples of the documents include Glazing\_Techniques, Acrylics, Frescoes, Secular\_Images, Food and Oils).

**Referring to claim 8**, Quinn/Nevin discloses the method of claim 1 including the steps:

(l) retrieving the identification of those documents resulting from the determination of step (k) (Nevin: see [0313] and [0315]);

(m) viewing one or more of the documents identified in step (l) and determining the quality of the match thereof with said step (e) text criteria (Nevin: see [0313] and [0315]).

**Referring to claim 9**, Quinn/Nevin discloses the method of claim 8 further comprising the steps:

(n) identifying a new text criteria as a result of a said step (m) determination of an insufficient said quality of said match (Nevin: see [0313] and [0315]);

(o) adding the identified new text criteria to the step (g) text criteria loaded into said positive designated one of said nodes (Nevin: see [0313] and [0315]); and

(p) reiterating said steps (h) through (m) (Nevin: see [0313] and [0315]).

**Referring to claim 10**, Quinn/Nevin discloses the method of claim 8 further comprising the steps:

(q) subsequent to said step (m), identifying and viewing at said display a list of features common to those documents the identification of which was retrieved in step (l) (Nevin: see [0313]-[0316]);

(r) identifying a new text criteria in correspondence with said step (q) identification and viewing at said display of said features common to those documents the identification of which was retrieved in step (l) (Nevin: see [0313]-[0316]);

(s) adding the identified new text criteria to the step (q) text criteria loaded into said positive designated one of said nodes (Nevin: see [0313]-[0316]); and

(t) reiterating said steps (h) through step (m) (Nevin: see [0313]-[0316]).

**Referring to claim 11**, Quinn/Nevin discloses the method of claim 1 in which:

said step (k) further comprises the steps:

(k1) determining additional text criteria where said document symbol locations are not likely to correspond with said text criteria determined at step (e) (Nevin: see [0313]-[0316]); and

(k2) adding said additional text criteria to said text criteria determined at said step (e) (Nevin: see [0313]-[0316]).

**Referring to claim 12**, hereafter Quinn/Nevin discloses the method of claim 8 in which:

said step (l) is carried out by drawing at said display of said net a boundary defining a region of said symbols (Nevin: see [0320] – the boundary region is determined by the available screen space).

**Referring to claim 13**, Quinn et al disclose a method for evaluating the text content of a database. In particular, Quinn et al disclose a method for evaluating the text content of a document database with respect to a population of documents (see abstract). comprising the steps of:

(a) providing a computer system having a user interface with a display (see [0106]);

(f) selecting a said document attribute to be correlated and the criteria for establishing an attribute value match (see [0093], lines 4-7 – the different genres are considered to represent the *text criteria*);

(g) determining the presence of one or more document attribute value match pairs as correlations between said first and second regions (see [0094] – grouping the attributes is considered to represent creating match pairs).

However, while Quinn et al disclose the method including the limitations (a), (f) and (g), Quinn et al fail to explicitly teach the further limitations of:

(b) forming one or more nets each comprising at least two nodes associated by at least one interaction, one or more said nodes representing an evaluation criteria, said one or more nets being viewable at said display;

(c) treating said documents to have an attribute value and calculating for each document a geometric relative distance with respect to a said node criteria and displaying corresponding document symbols at said display;

(d) delimiting at said display a first region of said document symbols;

(e) delimiting at said display a second region of said document symbols;

and

(h) displaying said correlations at said display.

Nevin discloses a method of displaying and storing data in linked nodes (see abstract), including the further limitations of:

(b) forming one or more nets each comprising at least two nodes associated by at least one interaction (see Fig 1), one or more said nodes representing an evaluation

criteria (see [0081] – the data is stored in the nodes), said one or more nets being viewable at said display (see Fig 1);

(c) treating said documents to have an attribute value and calculating for each document a geometric relative distance with respect to a said node criteria and displaying corresponding document symbols at said display (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(d) delimiting at said display a first region of said document symbols (see [0031] and Fig 1 – linking the nodes together is considered to represent *delimiting*; the connection of Node 1 to Node 2 is considered to represent a first region);

(e) delimiting at said display a second region of said document symbols (see [0031] and Fig 1 – linking the nodes together is considered to represent *delimiting*; the connection of Node 2 to Node 3 is considered to represent a second region);

(h) displaying said correlations at said display (see [0033] – the display of nodes based on a location calculated from force parameters is considered to represent *displaying correlations*).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the gathered documents of Quinn et al. One would have been motivated to do so to provide a better method for interfacing with playlists in a manner that interactively provides genres to the user (Quinn et al: see [0016], lines 7-9).

**Referring to claim 14**, Quinn/Nevin discloses the method of claim 13 in which:

said step (d) provides a said first region extending over more than one said net (Nevin: see [0031] and Fig 1); and

includes the step:

(d1) mapping said first region to a first document set by selecting the union or intersection of documents on different nets (Nevin: see [0031] and Fig 1).

**Referring to claim 15**, Quinn/Nevin discloses the method of claim 13 in which: said step (e) provides a said second region extending over more than one said net (Nevin: see [0031] and Fig 1); and

including the step:

(e1) mapping said second region to a second document set by selecting the union or intersection of documents on different nets (Nevin: see [0031] and Fig 1).

**Referring to claim 16**, Quinn/Nevin discloses the method of claim 13 in which: said step (f) selects said criteria for establishing an attribute value match by defining an attribute value tolerance (Quinn et al: see [0009] and [0093], lines 4-7 – the different genres are considered to represent the *text criteria*).

**Referring to claim 17**, Quinn/Nevin discloses the method of claim 16 in which: said step (g) determines the presence of a document attribute match pair by determining whether the attribute value of a document in said first region is equal to the attribute value of a document in said second region within said attribute value tolerance (Quinn et al: see [0009] and [0093]).

**Referring to claim 18**, Quinn/Nevin discloses the method of claim 13 in which:  
said step (d) is carried out by providing a computer generated line or lines visible at said display (Nevin: see [0083]).

**Referring to claim 19**, Quinn/Nevin discloses the method of claim 13 in which:  
said step (e) is carried out by providing a computer generated line or lines visible at said display (Nevin: see [0083]).

**Referring to claim 20**, Quinn/Nevin discloses the method of claim 13 in which:  
said step (h) is carried out by providing visible line at said display connecting two said symbols and representing said correlation (Nevin: see [0083]).

**Referring to claim 21**, Quinn/Nevin discloses the method of claim 13 in which:  
said step (f) selects said document attribute or document identification see (Nevin: [0093], lines 4-7); and

said step (g) identifies the same document in each said first and second region as a said correlation (Nevin: see [0094]).

9. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PGPub 2004/0078366 to Crooks et al (hereafter Crooks et al) in view of US PGPub 2005/0086238 to Nevin, III.

**Referring to claim 22**, Crooks et al disclose a method of evaluating the text content of a database. In particular, Crooks et al disclose a method for searching the text content of a document database with respect to a population of documents (see abstract), comprising the steps of:



(a) providing a computer system having a user interface with a display (see [0020]);

(b) identifying the population of documents to be searched (see [0022] – searching the database);

(c) normalizing the documents of the identified population (see [0023], lines 7-9 – normalizing the documents located in the database) with the steps comprising;

(c1) selecting character sequences that will separate words (see [0024], lines 65-70),

(c2) determining to either retain or eliminate punctuation characters (see [0024], lines 28-67),

(c3) setting regular expressions that will characterize numbers (see [0024], lines 1-28),

(c4) setting case behavior (see [0023], lines 2-10),

(c5) setting an offset and factor for numeric class (see [0024], lines 1-28),

(c6) converting a document of said identified population to a character (see [0023], lines 17-18) sequence,

(c7) accessing the words, or punctuation characters, W of said character sequences (see [0024], lines 1-28),

(c8) for each accessed W which is a number, converting such number into a sequence of word numbers, WN, and normalizing said word numbers for fingerprinting (see [0024], lines 1-28),

(c9) marking the position and length of each W or normalized word number WN (see [0026], lines 31 seq.),

(c10) for each W or normalized WN, completing said normalization by reiterating steps (c8) and (c9) (see [0026], lines 10-12 – refining is considered to represent repeating);

(d) fingerprinting said normalized documents (see [0024]-[0026]).

However, while Crooks et al disclose the method including limitations (a)-(c10), Crooks et al fail to explicitly teach the further limitations of:

(e) forming one or more nets, each comprising at least two nodes, one or more said nodes representing an evaluation criteria, said one or more nets exhibiting two or more spaced apart nodes connected by one or more interactions;

(f) for each normalized document, calculating its geometric relative distance from a said node;

(g) displaying said one or more nets at said display in combination with one or more document symbols representing a said document located in correspondence with said calculated relative distance; and  
determining from said document symbol locations at said display, if any, those documents which are more likely to correspond with said evaluation criteria.

Nevin discloses a method of displaying and storing data linked by nodes (see abstract), including the further limitations of:

(e) forming one or more nets, each comprising at least two nodes, one or more said nodes representing an evaluation criteria, said one or more nets exhibiting two or more spaced apart nodes connected by one or more interactions (see Fig 1);

(f) for each normalized document, calculating its geometric relative distance from a said node (see [0031] and [0185] – the connection strength of the link from one node to another is considered to represent the *relative distance*);

(g) displaying said one or more nets at said display in combination with one or more document symbols representing a said document located in correspondence with said calculated relative distance (see [0033]; [0084]; and Fig 2); and

determining from said document symbol locations at said display, if any, those documents which are more likely to correspond with said evaluation criteria (see [0313] and [0315] – the user determines which categories are considered to be bad or good).

It would have been obvious to one of ordinary skill at the time the invention was made to utilize Nevin's method for displaying documents to a user in the form of nodes to display the normalized documents of Crooks et al. One would have been motivated to do so to provide a better method for interfacing with in a manner that is user friendly for a physician (Crooks et al: see [0005]).

**Referring to claim 23**, the combination of Crooks et al and Nevin (hereafter Crooks/Nevin) discloses the method of claim 22 in which said step (c8) further comprises the steps:

(c81) convert any date characterized word number WN to a float or integer (Crooks et al: see [0030]-[0032]),

(c8.2) applying an offset and factor to the word number WN to derive X (Crooks et al: see [0030]-[0032]),

(c8.3) set the range, R (Crooks et al: see [0030]-[0032]),

(c8.4) calculate the quantity  $T = (\log_{10} X) / R$  (Crooks et al: see [0030]-[0032]),

(c8.5) successively decrementing the value of range, R and calculating the quantity, T until R is equal to zero (Crooks et al: see [0030]-[0032]),

(c8.6) designating S as the position of a significant numeral in X (Crooks et al: see [0030]-[0032]),

(c8.7) assigning each successive quantity T to a corresponding successive position S to derive the first component of normalized word number WN (Crooks et al: see [0030]-[0032]); and

(c8.8) subsequent to said step (c8.7), assigning each successive said numeral in X to a corresponding successive position S to derive a second component of said normalized word number, WN (Crooks et al: see [0030]-[0032]).

**Referring to claim 24**, Crooks/Nevin discloses method of claim 23 in which:

said step (c8.3) further comprises the step: (c8.3.1) setting the precision P of the normalized word number WN, said step (c8.8) is carried out until the number of said successive positions S deriving said second component equals the value of said precision, R (Crooks et al: see [0030]-[0032]).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent No. 6,154,213 to Rennison et al titled "Immersive Movement-Based Interaction with Large Complex Information Structures," which focuses on displaying documents visually to a user in the format of nodes.
- US Patent No. 6,360,227 to Aggarwal et al titled "System and Method for Generating Taxonomies with Applications to Content-Based Recommendations," which focuses on displaying information in the form of a graph taxonomy.
- US Patent No. 7,028,026 to Yang et al titled "Relevancy-Based Database Retrieval and Display Techniques," which focuses on retrieving, ranking and displaying data objects using link-based (e.g. vector-space cluster analysis) ranks.
- US Patent No. 6,888,548 to Gallivan titled "System and Method for Generating a Visualized Data Representation Preserving Independent Variable Geometric Relationships," which displays nodes as circles and documents as dots positioned around the nodes based on relevancy.
- US Patent No. 6,778,995 to Gallivan titled "System and Method for Efficiently Generating Cluster Groupings in a Multi-Dimensional Concept Space," which

Art Unit: 2167

focuses on generating cluster groupings and mapping correlated terms in a concept space.

**Contact Information**


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:30.

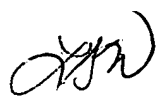
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on (571) 272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly Lovel  
Examiner  
Art Unit 2167

kml  
11 May 2006

  
JOHN R. COTTINGHAM  
PRIMARY EXAMINER

 12 May 2006